

## REMARKS

Reconsideration is respectfully requested of the Office rejection under 35 USC 103(a) of claims 10 to 18.

In the present amendment, claim 10 has been amended such that in the preamble “comprising of” now reads -- consisting essentially of --.

Remaining claims 11 to 18 are dependent on claim 10 and, accordingly, likewise require the limitation of the parent claims.

All claims under prosecution stand rejected over Geirhos USP 5,879,800 with a detailed discussion set forth of the applicability of the publication to various claims under prosecution.

In response, it is considered that the Office rejection focuses on a combination of reinforcing filaments to meet the limitations of the claims. It is considered that the Office reading of the claims is that the required thermoplastic matrix filament of Geirhos can be ignored. The patentee in all instances requires a thermoplastic polymer filament such as disclosed on column 1, lines 55 to 59 in the wording:

The present invention accordingly provides low-shrinkage hybrid yarns comprising reinforcing filaments and matrix filaments composed of thermoplastic polymers having a lower melting point than the melting or decomposition point of the reinforcing filaments.

In response to this grounds of rejection under 35 USC 103(a), claim 10 has been amended in the preamble by changing “comprising of” to read -- consisting essentially of --.

M.P.E.P. 2111.03 sets forth the following wording for the scope of “consisting essentially of”:

The transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original).

As set forth in the body of the present patent application:

One common problem with the flame-resistant protective apparel worn by firemen and others is that the fabrics used are typically quite heavy to provide needed thermal protection to the wearer.

(page 1, lines 5 to 8)

This invention is directed to a fabric having improved thermal properties, and comfort for use in protective apparel, and a garment containing that fabric.  
(page 1, lines 12 to 15)

The woven fabric of the present invention provides improved resistance to elevated temperature such as from a flame compared to a fabric using the same filaments but without entanglements or loops.

(page 2, lines 1 to 4)

This invention also provides for a protective garment such as firefighter's turnout gear, having the fabric of this invention as the outer shell.

(page 2, lines 11 to 13)

Additional disclosure is present throughout remaining sections of the patent application setting forth utility in a firefighting environment with an ability of the fabric to withstand elevated temperatures.

It is considered that the use of "consisting essentially of" in all claims under prosecution eliminates the applicability of Geirhos with its use of a matrix filaments composed of thermoplastic polymers. It is noted that Geirhos discloses on page 7, lines 31 to 35, that melting of the matrix component can occur in conversion and stabilization of textile sheet material into composites. Obviously, melting of a filament lies outside the scope of the present invention and all claims exclude such filament which would affect the basic and novel characteristics of the claimed invention.

Reconsideration and removal of the grounds of rejection is requested. A notice of allowance is solicited.

Respectfully submitted,



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